Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	
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Re:	IEEE 802.16 Session #47 plus over the phone
Abstract	This contribution proposes the updates of IEEE 802.16g D7 document in order to obtain loading information from the Base Station
Purpose	Update 802.16g draft obtain uplink and downlink loading information
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DL and UL loading parameters information

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1. Introduction

In order for MS to enter 802.16 network for the first time, MS shall obtain DCD and UCD then will commence network entry procedure by initiating the initial ranging procedure. Before ranging with a particular BS, the MS shall obtain the DL and UL loading information form the DCD and UCD broadcast messages and take the loading report into consideration when selecting a particular BS. The loading condition is not the only factor for BS selection, however it is an important information when load balancing is required prior to network entry.

2. Proposed Text Change

Remedy 1:

Factor the loading information on the Down Link.

[In 6.3.9.2 Obtain downlink parameters, Modify the text]:

6.3.9.2 Obtain downlink parameters

The MAC shall search for the DL-MAP MAC management messages. The SS achieves MAC synchronization once it has received at least one DL-MAP message and is able to decode the DL-Burst Profiles contained therein. An SS MAC remains in synchronization as long as it continues to successfully receive the DL-MAP and DCD messages for its Channel and the Non-pre-assigned DL radio resources in the DCD message is higher than the Radio_resources DL loading_system_paramater". If the reported Non-pre-assigned DL radio resources are less than the "Radio_resources DL loading_system_paramater" threshold the SS/MS should continue scanning to find another channel. If the Lost DL-MAP Interval (Table 342) has elapsed without a valid DL-MAP message or the T1 interval (Table 342) has elapsed without a valid DCD message, an SS shall try to reestablish synchronization. The process of acquiring synchronization is illustrated in Figure 56. The process of maintaining synchronization is illustrated in Figure 57.

(Note to Editor: Need to modify Figure 56, looking for the Visio version)

Remedy 2:

Factor the loading information on the Uplink Link.

[In 6.3.9.3 Obtain uplink parameters, Modify the text]:

6.3.9.3 Obtain uplink parameters

After synchronization, the SS/MS shall wait for a UCD message from the BS in order to retrieve a set of transmission parameters for a possible uplink channel. These messages are transmitted periodically from the BS for all available uplink channels and are addressed to the MAC broadcast address.

If no uplink can be found after a suitable timeout period, or if the Non-pre-assigned UL radio resources in the UCD message is lower than the Radio_resources_UL_loading_system_paramater then the SS shall continue scanning to find another downlink channel. The process of obtaining uplink parameters is illustrated in Figure 58. (Editor: need to change Figure 58, need a Visio version)

The SS shall determine from the channel description parameters whether it may use the uplink channel. If the channel is not suitable or the Non-pre-assigned UP radio resources are lower than the Radio_resources_UL_loading_system_paramater, then the SS shall continue scanning to find another downlink channel. If the channel is suitable, the SS shall extract the parameters for this uplink from the UCD. Then, the SS shall wait for a bandwidth allocation map for the selected channel. It may begin transmitting uplink in accordance with the MAC operation and the bandwidth allocation mechanism.

The SS shall perform initial ranging at least once, per Figure 60 and Figure 61. If initial ranging is not successful, the procedure is

restarted from scanning to find another downlink channel.

The SS MAC is considered to have valid uplink parameters as long as it continues to successfully receive the UL-MAP and UCD message is not received within the time intervals specified in Table 342, the SS shall not use the uplink. This is illustrated in Figure 59.